FORSPAN ASSESSMENT MODEL FOR CONTINUOUS ACCUMULATIONS-BASIC INPUT DATA FORM (NOGA, Version 9, 2-10-03)

IDENTIFICATION INFORMATION

Assessment Geologist: R.C. Johnson Date:						9/19/2005		
Region: North America Number:								
Province:	Wind River B	asin			Number:	5035		
Total Petroleum System: Cretaceous-Lower Tertiary Composite Number:								
Assessment Unit: Meeteetse Coalbed Gas Number:								
Based on Data as of:	untested							
Notes from Assessor:	analogs: Pice	eance Basin (5	50200282) and	d Southwestern	Wyoming (50370	0581)		
	CHAR	RACTERISTIC	S OF ASSES	SMENT UNIT				
Assessment-unit type: OW What is the minimum tot					oot. additions ocfg for gas A.U.	Gas		
Number of tested cells:	()	, cen:	0.02 (11111	ibo ioi oii A.O., i	ocig ioi gas A.O.)		
Number of tested cells with		per cell > mir	nimum:	0				
Established (discovered cells	-	•		X				
Median total recovery per	′	• • • • • • • • • • • • • • • • • • • •	,	cfg for gas A.U.)				
	1st 3rd disc			2nd 3rd	3rd 3r	d		
Assessment-Unit Probab Attribute	oilities:		Probabi	lity of occurrence	e (0-1 0)			
1. CHARGE: Adequate pe	troleum charge	e for an untest		_		1.0		
2. ROCKS: Adequate rese						1.0		
3. TIMING: Favorable geo	•					1.0		
J	0 0			7 —				
Assessment-Unit GEOLO	OGIC Probabil	l ity (Product o	of 1, 2, and 3):			1.0		
NO. OF U	INTESTED CE	LLS WITH PO	OTENTIAL FO	R ADDITIONS	TO RESERVES			
1. Total assessment-unit	area (acres):	(uncertainty of	f a fixed value)				
calculated mear	า 376,000	minimum _ :	338,000	mode <u>376,0</u>	000 maximun	n 414,000		
2. Area per cell of unteste	ed cells having	potential for a	additions to re	serves (acres):	(values are inhei	ently variable)		
calculated mear	n 146.7	minimum	40	mode120) maximun	n <u>280</u>		
uncertainty of mean	: minimum	<u>100</u> m	aximum	190				
3. Percentage of total ass	sessment-unit	area that is un	tested (%): (u	uncertainty of a f	ixed value)			
calculated mear	n <u>100</u>	minimum	100	mode100) maximun	n 100		

NO. OF UNTESTED CELLS WITH POTENTIAL FOR ADDITIONS TO RESERVES (Continued)

		(Continued)			
4.	Percentage of untested assessment- (a necessary criterion is that total re				
	calculated mean 6.3	minimum 1	mode 3	maximum _	15
		At minimum, thickest coals Dacres high potential area 000 acres of high potentia	with 75% success ratio		
		TOTAL RECOVERY P	ER CELL		
	tal recovery per cell for untested cells alues are inherently variable; mmbo for				
	calculated mean0.13	minimum 0.02	median 0.08	maximum _	2
(AVERAGE COPRODUCT R (unlassessment unit: Gas/oil ratio (cfg/bo) NGL/gas ratio (bngl/mmcfg)	RATIOS FOR UNTESTED ncertainty of fixed but unk minimum	-	OPRODUCT	S maximum
	as assessment unit: _iquids/gas ratio (bliq/mmcfg)	0	2	<u>-</u>	5

		LLARY DATA FOR UN		
Oil assessment unit: API gravity of oil (degrees Sulfur content of oil (%) Depth (m) of water (if app	3)	minimum	mode	maximum
Drilling depth (m)				
minimum 	F75	mode 	F25	maximum
Gas assessment unit: Inert-gas content (%) CO ₂ content (%) Hydrogen sulfide content Heating value (BTU) Depth (m) of water (if app Drilling depth (m) minimum	licable)	minimum 0.10 0.50 0.00 850	mode 0.30 1.80 0.00 950	maximum 1.00 20.00 0.00 1050 maximum
90	678	900	1180	1800
Success ratios: ca Future success ratio (%) Historic success ratio, teste	lculated mean 35 d cells (%)	minimum 5	mode 40	maximum 60
Completion practices: 1. Typical well-completion 2. Fraction of wells drilled 3. Predominant type of stir 4. Fraction of wells drilled	that are typically stir mulation (none, frac,	nulated	vity, other) convention 1 hydro 0	

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO STATES

Surface Allocations (uncertainty of a fixed value)

1. Wyoming		_represents_	100	_area % of the AU	
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum 	
Gas in gas assessment unit: Volume % in entity			100	_	
2		_represents_		_area % of the AU	
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum 	
Gas in gas assessment unit: Volume % in entity				_	
3		_represents_		_area % of the AU	
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum 	
Gas in gas assessment unit: Volume % in entity					
4		_represents_		area % of the AU	
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum 	
Gas in gas assessment unit: Volume % in entity					
5		_represents_		_area % of the AU	
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum 	
Gas in gas assessment unit: Volume % in entity				_	
6		_represents_		area % of the AU	
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum 	
Gas in gas assessment unit: Volume % in entity				_	

7		represents		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit:				
Volume % in entity				
8		represents		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit:				
Volume % in entity				
9		_represents_		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum —
Gas in gas assessment unit:				
Volume % in entity				
10		_represents_		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit:				
Volume % in entity				
11		_represents_		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum —
Gas in gas assessment unit:				
Volume % in entity				_
12		_represents_		area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum —
Gas in gas assessment unit: Volume % in entity				

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO GENERAL LAND OWNERSHIPS Surface Allocations (uncertainty of a fixed value)

1. Federal Lands		_represents_	40.91	area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit: Volume % in entity			41	
2. Private Lands		_represents_	27.74	area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit: Volume % in entity			28	
3. Tribal Lands		_represents_	25.42	area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit: Volume % in entity			25	
4. Other Lands		_represents_	0.3	area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit: Volume % in entity			0.3	
5. State 1 Lands		_represents_	5.64	area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit: Volume % in entity		_ <u> </u>	5.7	
6		_represents_		area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit: Volume % in entity				

7		represents		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit:				
Volume % in entity				
8		represents		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit:				
Volume % in entity				
9		_represents_		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum —
Gas in gas assessment unit:				
Volume % in entity				
10		_represents_		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit:				
Volume % in entity				
11		_represents_		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum —
Gas in gas assessment unit:				
Volume % in entity				_
12		_represents_		area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum —
Gas in gas assessment unit: Volume % in entity				

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO FEDERAL LAND SUBDIVISIONS Surface Allocations (uncertainty of a fixed value)

1.	Bureau of Land Management (BLM)		_represents_	40.71	_area % of t	he AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Ga	s in gas assessment unit: Volume % in entity			41	_	
2.	BLM Wilderness Areas (BLMW)		_represents_		_area % of t	he AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
<u>Ga</u>	s in gas assessment unit: Volume % in entity				_	
3.	BLM Roadless Areas (BLMR)		_represents_		_area % of t	he AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Ga	s in gas assessment unit: Volume % in entity				_	
4.	National Park Service (NPS)		_represents_		_area % of t	he AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	<u>_</u>	maximum
<u>Ga</u>	s in gas assessment unit: Volume % in entity				_	
5.	NPS Wilderness Areas (NPSW)		_represents_		_area % of t	he AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Ga	s in gas assessment unit: Volume % in entity				_	
6.	NPS Protected Withdrawals (NPSP)		_represents_		_area % of t	he AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
<u>Ga</u>	s in gas assessment unit: Volume % in entity				_	

7.	US Forest Service (FS)		_represents_		area % of t	he AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	<u> </u>	maximum
<u>Ga</u>	s in gas assessment unit: Volume % in entity				_	
8.	USFS Wilderness Areas (FSW)		_represents_		area % of	the AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
<u>Ga</u>	s in gas assessment unit: Volume % in entity				_	
9.	USFS Roadless Areas (FSR)		_represents_		_area % of t	the AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
<u>Ga</u>	s in gas assessment unit: Volume % in entity				_	
10.	USFS Protected Withdrawals (FSP)		_represents_		area % of	the AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
<u>Ga</u>	s in gas assessment unit: Volume % in entity				_	
11.	US Fish and Wildlife Service (FWS)		_represents_		_area % of	the AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
<u>Ga</u>	s in gas assessment unit: Volume % in entity				_	
12.	USFWS Wilderness Areas (FWSW)		_represents_		_area % of	the AU
<u>Oil</u>	in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
<u>Ga</u>	s in gas assessment unit: Volume % in entity					

13. USFWS Protected Withdrawals (FV	VSP)	_represents_		_area % of	the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity				_	
14. Wilderness Study Areas (WS)		_represents_		area % of	the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity				_	
15. Department of Energy (DOE)		_represents_		_area % of	the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity				_	
16. Department of Defense (DOD)		_represents_		_area % of	the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity				_	
17. Bureau of Reclamation (BOR)		_represents_	0.2	area % of	the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity		- <u>-</u>	0	_	
18. Tennessee Valley Authority (TVA)		_represents_		_area % of	the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity					

19. Other Federal	represents		area % of the AU	
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit: Volume % in entity				
20		_represents_		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit: Volume % in entity				

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO ECOSYSTEMS Surface Allocations (uncertainty of a fixed value)

Central Basin and Hills (CNBH)		_represents_	100	area % of t	he AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity			100	_	
2		_represents_		area % of t	he AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity				_	
3		_represents_		area % of t	he AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity				_	
4		_represents_		area % of t	he AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity				_	
5		_represents_		area % of t	he AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity				_	
6		_represents_		area % of t	he AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	_	maximum
Gas in gas assessment unit: Volume % in entity				<u> </u>	

7		represents		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit:				
Volume % in entity				
8		represents		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit:				
Volume % in entity				
9		_represents_		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum —
Gas in gas assessment unit:				
Volume % in entity				
10		_represents_		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit:				
Volume % in entity				
11		_represents_		_area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum
Gas in gas assessment unit:				
Volume % in entity				_
12		_represents_		area % of the AU
Oil in oil assessment unit: Volume % in entity	minimum		mode	maximum —
Gas in gas assessment unit: Volume % in entity				